



SOCIETY OF ACTUARIES

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EUROPEAN 1972 PROPOSAL ON ACTUARIAL NOTATION

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(This is Article No. 3 in a series.)

The proposal by Adam, Boehm and thirteen other European actuaries to the 19th International Congress simplified theirs of four years earlier, made it more systematic and overcame ambiguities. Again, upper and lower case symbols and the Greek alphabet were used, making the system still not directly useable by computer.

The base symbol followed by five blocks was retained, but the blocks redefined thus:

- Block (i): Age and order of succession of events.
- Block (ii): Time elements.
- Block (iii): Periodicity of events.
- Block (iv): Interest rate.
- Block (v): Mortality or other table.

As examples:

Current

Proposed

$$\ddot{a}_{x:\overline{n}|}^{(4)}$$

$$a t (x, x:n, 4)$$

$$\ddot{a}_{xy}$$

$$a t (x) + a t (y) - a t (x:y)$$

$$\bar{A}_x$$

$$A c (x)$$

$$t V_x$$

$$V(A(x), P(A(x); \ddot{a}(x)); t)$$

A few common symbols were given special short forms. Translation to computer-useable form was to be made by using capital P in conjunction with upper case letters for normally lower case forms, e.g., a became AP. Punctuation marks were also translated.

This proposal was well thought through but problems of clumsiness persisted.

"The Actuarial Profession"— New and Improved

A revised version of the Society's recruiting booklet, "The Actuarial Profession", is now available. The language has been simplified; the booklet is now suitable for high school as well as college students.

The new booklet encourages prospective actuaries to develop a wider range of interests than just math, as it stresses that actuaries are business executives, not technicians. Casualty insurance is integrated into the new booklet, and a table of broadly estimated salary ranges is included. Another addition is an order form for examination and other career information.

For copies of the new booklet, ask Linda Delgadillo at the Society office, Chicago.

D.A.P.

ADIRONDACK ACTUARIES CLUB

We welcome the newly formed Adirondack Actuaries Club, whose territory includes all of upstate New York and adjacent western New England. Membership totals more than 100, over 60% of whom attended its initial meeting in Albany on June 4th.

Readers interested in joining, write or phone Burl V. Bachman at his Yearbook location.

BOOKS NEEDED

The Actuarial Science Program, University of Nebraska-Lincoln, seeks to acquire copies of Proceedings of International Congresses. Need volumes for First (1895) and any of Tenth and subsequent (1934-80) Congresses. Donations are tax-deductible. Write or phone Prof. Walter B. Lowrie at his Yearbook location.

Personal Life Assurance

(Continued from page 1)

companies by their projections of 10 years ago, the coefficient of rank correlation with emerging results is a ludicrous 20%. Yet, companies that perform well tend to do so consistently.

With-Profits vs. Unit-Linked

Moving on to look at our important unit-linked (variable life) market, Mr. Short finds the comparison instructive. Mean proceeds at £1,778 are slightly higher than the with-profits figure of £1,742; but against this, the standard deviation for the former is £282 compared with £106 for the latter. A slightly higher mean return, but a greatly increased risk—so the investor's choice between them would have to depend on his own utility curve; is he a steady man, or a punter with an eye for a sporting chance? It's noteworthy that in this particular comparison the traditional policies came out surprisingly well against their brash younger cousins.

Mr. Short gives further figures for equity-linked as opposed to property-linked funds, and takes into account the difference between single premium and monthly premium policies. His statement that the timing of surrender of a unit-linked policy is crucial will be appreciated by all familiar with volatility of prices on the stock markets, whether on Wall Street or Throgmorton. The paper confirms what commonsense would have suggested, but teaches the lesson that when choosing or recommending a life policy you need to do your homework and to disregard those enticing projections.

It would be interesting to know whether these points apply as much in America as they do in the U.K. Readers may get Mr. Short's paper from any Institute member or from G. Chamberlin, Clay & Partners, 70 Brook Street, London W1Y 2HN.

BOOKS AVAILABLE

Another retired actuary is contributing a set of the *TRANSACTIONS*, complete back to Vol. I (1949), to somebody willing to pay shipping cost. Apply to: Daniel W. Pettengill, 1028 Farmington Ave., Apt. 3A, West Hartford, CT 06107.